

FIG. 1. When the current time passes a VC's scheduled time, then a cell from the VC will be transmitted, or placed in a transmit queue, and that VC will be rescheduled on the calendar for a later time. In FIG. 1 virtual channels (VC1 and VC2) are transmitting at the same speed while VC3 is at a slower data rate. Thus, as shown in FIG. 1, when the current time advances by a "tick" a cell is transmitted [from each VC and that VC is scheduled for a later time slot in the calendar] for the VC which his scheduled at that time.

IN THE CLAIMS

Please cancel issued claims 1 to 12.

Please add claims 13 to 23 as follows:

13. A communication system having a plurality of ports with respective data rates; each one of said ports being associated with a calendar having a plurality of successive calendar time slots for indicating data, or absence thereof, to be transmitted; a pointer pointing to one of the time slots; and a calendar clock pulse for effecting transmission of data, in accordance with the calendar time slot pointed to by the pointer, the transmission of data being onto the port associated with the calendar, and advancing the pointer to a next calendar time slot, the system comprising:
- means for generating a master clock pulse at a rate greater than or equal to the highest of the respective data rates of the plurality of ports; and
- means for deriving the calendar clock pulse for each calendar based on said master clock pulse, so as to have a rate not higher than the data rate of the port associated with the calendar.

14. A communication system as defined in claim 13, wherein said means for generating a master clock pulse relies on a clock signal received from the port having the highest data rate.
15. A communication system as defined in claim 14, wherein the rate of the calendar clock pulse for each calendar is approximately equal to the data rate of its associated port.
16. A communication system as defined in claim 15 having means to calculate an increment value and a tick threshold value based on the calendar clock pulse and data rate of each port and said means for deriving said calendar clock pulse for each calendar based on said master clock pulse further has:
a port counter having means to accumulate said calculated increment value;
means for generating said calendar clock pulse, if said accumulated increment value is lower than said calculated tick threshold value; and
means for decrementing said port counter by a predetermined decrement value, if said accumulated increment value is greater than or equal to said calculated tick threshold value.
17. A communication system as defined in claim 13, wherein said means for generating a master clock pulse generates a pulse n times faster than the data rate of the port having the highest data rate.
18. A communication system as defined in claim 17 wherein said means for deriving the calendar clock pulse for each calendar based on the master clock pulse further comprises:
a global counter that is incremented by one unit value for each master clock pulse; and

means for generating said calendar clock pulse and subsequently incrementing a port counter by a predetermined increment value if a value of said global counter is equal to or greater than said port counter.

19. A method for transmitting data on multiple ports having different data rates, each of said ports being associated with a calendar having a pointer pointing to one of a plurality of calendar time slots which indicate data, if any, to be transmitted, and a calendar clock pulse for triggering the transmission of said data, if any, onto one of said ports and thereafter advancing the pointer to a next calendar time slot, the method comprising the steps of :

generating a master clock pulse having a rate that is equal to or greater than the data rate of the port having the highest data rate; and
deriving a calendar clock pulse based on the master clock pulse, such that the rate of transmission from the calendar is less than or equal to the data rate of the port associated with the calendar.

20. The method as defined in claim 19 wherein said master clock pulse is derived from the data rate of the port having the fastest rate.

21. The method as defined in claim 20 wherein the step of deriving a calendar clock pulse based on the master clock pulse further comprises:
incrementing a port counter by a predetermined increment value;
generating said calendar clock pulse if said port counter has a value lower than a predetermined tick threshold; and

decrementing said port counter by a predetermined decrement value if said port counter has a value greater than or equal to said predetermined tick threshold.

22. The method as defined in claim 21 wherein said master clock pulse is n times greater faster than the data rate of the port having the fastest data rate.

23. The method as defined in claim 22 wherein said step of deriving a calendar clock pulse based on the master clock pulse further comprises the steps of:
incrementing a global counter by a unit value; and
generating said calendar clock pulse, if said said global counter is greater than or equal to a port counter, and subsequently incrementing said port counter by a predetermined increment value.

STATUS OF CLAIMS AND SUPPORT FOR CLAIM CHANGES
(37 CFR 1.173 (c))

By this Preliminary Amendment issued claims 1 to 12 have been cancelled and claims 13 to 23 have been added.

Support for the added claims are as follows:

Claim 13 is supported in the patent beginning at column 2 line 46 to column 3 line 10.

Support for claim 14 is found at column 3 beginning at line 55.

Support for claim 15 is found at column 4 beginning at line 41.

Support for claim 16 is found at column 3 beginning with the paragraph at line 50.

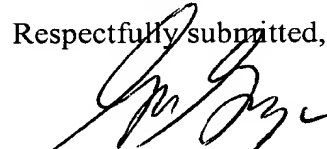
Claim 17 is supported at column 4 line 46.

Claim 18 is supported at column 4 line 56.

Claims 19 through 23 are the method aspects of the system claims 13 through 18 and are supported by the sections indicated above.

Favorable consideration of this reissue application is respectfully requested.

Respectfully submitted,



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